THE MINERAL INDUSTRY OF TUNISIA

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The Government owned all minerals in Tunisia. In 2004, mineral production included barite, clay, gypsum, iron ore, lead, phosphate rock, silver, and zinc. Salt was recovered primarily from coastal salt works. Mineral exploration and production were licensed by the Government according to the new Mining Code (law No. 2003-30 of April 28, 2003). The Hydrocarbon Code (law No. 99-93 of August 17, 1999) regulated offshore and onshore natural gas and oil exploration and production. Processed mineral commodities produced in Tunisia included ammonium fluoride, cement, fertilizers, lime, refined petroleum products, and steel. The country also had an extensive metal manufacturing sector, which included production of electrical wiring arrays for export to European automobile assembly plants.

The natural gas and petroleum sector accounted for about 3% of Tunisia's gross domestic product (GDP) in 2004. The cement, construction materials, glass, and mining sectors accounted for about 2.5% of the GDP and phosphate-based fertilizer production accounted for nearly 2%. In 2004, the GDP based on purchasing power parity of this 163,610-square-kilometer North African nation was estimated to be about $77.4 billion.[1] The per capita GDP based on purchasing power parity was $7,732 (International Monetary Fund, 2005§[2]).

Commodity Review

Metals

Gold.—In northwestern Tunisia, Albidon Ltd. of Australia initiated a regional geochemical sampling program on its Nefza exploration permit, which included the Kef El Agueb, the Oued Belif, and the Ras Rajel gold prospects.

Lead and Zinc.—In 2004, Breakwater Tunisia S.A. (a subsidiary of Breakwater Resources Ltd. of Canada) milled 330,392 metric tons (t) of lead-zinc ore. The Bougrine mill produced 52,149 t of zinc concentrates that contained 28,265 t of zinc and 8,499 t of lead concentrates that contained 5,470 t of lead. Ore was sourced primarily from Breakwater's Bougrine Mine and supplemented by feed (28,869 t) from the Government's lead-zinc mine. Breakwater projected that the Bougrine ore reserves would be depleted and that the mine would be closed by September 2005 (Breakwater Resources Ltd., 2005, p. 22-23).

The joint venture of Albidon and BHP World Exploration Inc. (a subsidiary of the BHP Billiton group) continued evaluation of the Jebel Trozza exploration permit. Albidon completed geologic mapping and rock chip sampling on the permit, which included the Jebel Touila zinc sulfide and the Jebel Trozza zinc oxide prospects.

In August, Maghreb Minerals Plc of the United Kingdom acquired 100% equity interest in High Marsh Holdings Ltd. of the British Virgin Islands, primarily from Consolidated Global Minerals Ltd. of Canada and Trident Nominees Ltd. In the transaction, Maghreb acquired interest in nine exploration permits, which included the Djebba, the Fej Lahdoum-Ain Jemmala, the Hammala, the Koudiat Sidii, the Lorbeus (Koudiat Louatia), and the Ouled Moussa prospects and options to acquire from the Government the inactive Bou Jabeur barite-lead-zinc mine and the operating Fej Lahdoum lead-zinc mine (Consolidated Global Minerals Ltd., 2004a, b; Maghreb Minerals Plc, 2004, p. 3, 57-58).

Industrial Minerals

Cement.—In 2003, Société des Ciments d'Enfidha started production from its second clinker line. The 1,900-metric-ton-per-day-capacity line was built by Polysius S.A.S. (World Cement, 2004).

The 400,000-metric-ton-per-year (t/yr)-capacity Terminal Cimentier de Gabès was opened in February 2004. The import terminal, which was owned by Société des Ciments d'Enfidha, Société des Ciments de Gabès, and Société des Ciments de Jbel Oust, was designed to handle petroleum coke. For environmental reasons, the cement companies were converting their cement facilities to burn coal or petroleum coke instead of residual fuel oil. In March, Société des Ciments de Jbel Oust commissioned a grinding mill that could process 35 metric tons per hour (t/hr) of coal, or 22 t/hr petroleum coke (World Cement, 2004; Corporación Uniland, S.A., undated§).

The Governments of Algeria and Tunisia offered to divest their interest in the jointly owned Société Tuniso-Algérienne de Ciment Blanc S.A., but the three bids received in 2004 by the Governments on the 200,000-t/yr-capacity cement plant at Feriana were not satisfactory. The plant's proposed privatization was rescheduled for early 2005 (Middle East Economic Digest, 2004; Société Tuniso-Algérienne de Ciment Blanc, 2005§).

Outlook

The country's export-oriented economic policy was strengthened in 2004 with the signing of the Agadir Agreement, which was a free trade agreement between Egypt, Jordan, Morocco, and Tunisia. All four nations also had Euro-Mediterranean Association

[1]Where necessary, values have been converted from Tunisian dinars (TD) to U.S. dollars (US$) at an average rate of TD1.29=US$1.00 for 2004 and TD1.31=US$1.00 for 2003.

[2]References that include a section mark (§) are found in the Internet References Cited section.

Agreements, which included economic and social cooperation and bilateral free trade agreements with the European Union. The Agadir Agreement was considered to be the foundation for the creation of a Euro-Mediterranean free trade zone.

The mineral and energy sectors, which accounted for about 17% of exports, are integral parts of Tunisia's economic future. Metal deposits in northern Tunisia are expected to continue to attract junior exploration companies. Light manufacturers, such as automobile electrical harness producers, are expected to increase the national consumption of copper as long as the demand for parts for vehicles manufactured in Europe continues. The hydrocarbon resources of Tunisia, which were small relative to the other oil-producing nations of North Africa, are expected to continue to attract independent oil companies.

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Major Sources of Information

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TABLE 1
TUNISIA: PRODUCTION OF MINERAL COMMODITIES[1]

(Thousand metric tons unless otherwise specified)

Commodity[2]		2000	2001	2002	2003	2004[p]
METALS						
Iron and steel:						
Iron ore:						
Direct shipping ore and concentrate, gross weight		182	204	198	164	244
Fe content		98	109 [e]	105	97	128
Metal:						
Pig iron		196	192	152	36	--
Steel, crude		237	239	200	86	70
Lead, mine output, Pb content	metric tons	6,602	6,820 [e]	5,081	5,000	5,500 [e]
Silver metal, primary[e]	kilograms	3,700	3,650	3,000	3,000	3,000
Zinc:						
Concentrate, gross weight	metric tons	74,996	73,000	64,890	65,800	52,747
Zn content	do.	41,247	37,900 [e]	35,692	36,000	29,011
INDUSTRIAL MINERALS						
Barite	do.	3,702	2,208	5,539	3,000	1,813
Cement, hydraulic[3]		5,657	5,721	6,022	6,038	7,124
Clays, for construction and clay products		3,870	4,260	4,400	4,500	5,000 [e]
Fertilizers:						
Triple superphosphate		805	783	796	875	872
Phosphoric acid		1,043	1,144	1,219	1,164	1,241
Diammonium phosphate		1,113	1,124	1,315	1,324	1,313
Ammonium nitrate		182	170	127	164	130
Fluorine, aluminum fluoride		43	44	39	45	45 [e]
Gypsum[e, 4]		125	125	125	110	130
Lime		517	467	471	446	450 [e]
Phosphate rock, washed, gross weight		8,339	8,144	7,461	7,890	7,954
Salt, marine		620	654	616	700	608
MINERAL FUELS AND RELATED MATERIALS						
Gas, natural:						
Gross	million cubic meters	1,985	2,254	2,149	2,167	2,530
Dry[e]	do.	1,600	1,800	1,700	1,750	2,050
Petroleum:						
Crude	thousand 42-gallon barrels	28,207	26,300	26,800	24,300	25,700
Refinery products:						
Liquefied petroleum gas	do.	1,279	1,180	1,310	1,200	1,300
Gasoline	do.	3,301	3,690	3,380	3,600	3,700
Kerosene	do.	1,216	1,560	1,590	1,270	1,300
Distillate fuel oil	do.	4,010	3,490	3,500	3,780	4,000
Residual fuel oil	do.	4,346	3,950	4,020	4,050	3,200
Other[e]	do.	940	940	1,120	1,180	400
Total[e]	do.	15,100	14,800	14,900	15,100	13,900

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [p]Preliminary. -- Zero.

[1]Table includes data available through August 10, 2005.

[2]In addition to the commodities listed, a variety of crude construction materials (sand and gravel and stone) was produced, but output was not reported, and available information was inadequate to make estimates of output levels.

[3]Includes white cement production, in thousand metric tons: 2000--250; 2001--247; 2002--259; 2003--292; and 2004--304.

[4]Does not include phosphatic gypsum (waste product) generated during fertilizer production.

TABLE 2
TUNISIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2004

(Metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity
Aluminum fluoride	Industries Chimiques du Fluor	Ghannouch, near Gabès	42
Cement:			
Portland	Société des Ciment d'Enfidha	Enfidha	2,000
Do.	Société des Ciment de Jbel Oust	Jbel Oust	1,200
Do.	Société des Ciment d'Oum el Kélil	Le Kef	970
Do.	Société des Ciment de Bizerte	Bizerte	840
Do.	Société des Ciments Artificiels Tunisiens	Ben Arous	800
Do.	Société des Ciment de Gabès	Gabès	733
White	Société Tuniso-Algérienne de Ciment Blanc S.A.	Feriana	200
Fertilizer:			
Ammonium nitrate	Group Chimique Tunisienne	Ghannouch, near Gabès	330
Diammonium phosphate	do.	do.	1,000
Triple superphosphate	do.	M'Dhilla	465
Do.	do.	Sfax	330
Iron and steel:			
Iron ore	Société de Djebel Djerissa	Djerissa Mine	175
Do.	do.	Tamera Mine	75
Steel, crude	Société Tunisienne de Sidérurgie	El Fouladh	70
Steel, rolled, bar and rod	Intermetal S.A.	Ben Arous	300
Lead and zinc ore	Breakwater Tunisia S.A.	Bougrine Mine	330
Do.	Compagnie Miniere du Nord Ouest	Fej Lahdoum	50
Petroleum, refined 42-gallon barrels per day	Société Tunisienne des Industries du Raffinage	Bizerte	34,000
Phosphate rock	Compagnie des Phosphates de Gafsa	Kef Eddour Mine	3,200
Do.	do.	Kef Eschfair Mine	3,000
Do.	do.	Jallabia	1,700
Do.	do.	Redeyef Mine	150
Phosphoric acid	Group Chimique Tunisienne	Ghannouch, near Gabès	405
Do.	do.	Skhira	365
Do.	do.	M'Dhilla	183
Do.	do.	Sfax	131
Salt	Compagnie Générale des Salines de Tunisie	Zarzis and Sahline Sousse	750
Do.	SAIDA S.A.	Sebkhet Sidi El Héni, Zéramdine	250